Letters

I, We, One, and Presently

The instructions to contributors that you have lately published (26 July, p. 305) please me so much that I offer the following remarks in order to amplify and emphasize some of them.

The discriminating use of language for communication of ideas is an art that scientists should not disdain; even if we have not taste or time for erecting monuments of literature, at least we need not live in a slaughter house of syntax and rhetoric.

Among the most abused words in the scientific literature of the United States during the past few decades are *I*, we, one, and presently.

Occasions for the use of *one* in its indefinite pronominal sense, as in "One never knows, does one?" and "One should respect authority" arise but seldom, and are always easily avoided. Therefore those who are unwilling to take the trouble to use it properly would better not use it at all. Those who habitually use it improperly seem to fall into two classes:

- 1) Those who mistakenly think the French on and the German man are synonyms for one. "On dit" and "man sagt" mean "it is said," or more colloquially "they say" or "people say" or "we say" and not "one says." I do not know any precise French or German equivalent for the impersonal one, and perhaps none exists. But the meaning of one is very close to anyone or everyone, according to the context, which in French is aucun or chacun or quelqu'un, never on.
- 2) Those who, having been wisely taught to avoid the editorial we, can think of no other suitable locution. It is good usage to write "When the equation is multiplied by x, the result is . . ." or even "After multiplying the equation by x, we obtain . . .", if by we is meant the author and the reader, and not the author alone. On the other hand, a single author should not write "We wish to find the roots" because

the reader may have no such wish, and it is presumptuous for the author to impute motives to the reader. Likewise he should not write "I wish to find the roots" because it is redundant; his wish is obvious, else he would not do it. It is always possible to say "The roots are needed for . . ." or "In order to find the roots . . ." or a dozen other things.

The word *I* has been forbidden to appear in scientific papers by instructors who, shuddering at the juvenile practice of beginning every sentence with it, are either too obtuse to learn its proper use, or too lazy to teach it. But there is nothing more conducive to felicitous writing than a judicious use of *I* and we.

We should be used whenever the author and the reader jointly is intended. It may also be used when there are two or more authors, and the authors only are meant, but only if I would have been appropriate for a single author.

I should be used whenever the opinion, hope, or judgment of the author is involved, that is, when the author becomes important to the reader as a person, but to use it elsewhere is immodest and tiresome. It is poor taste, silly, and wasteful of space to write "the author is indebted . . ." instead of "I am indebted . . ." It is poor taste, silly, and inaccurate to say "It is thought . . ." if what is meant is "I think. . . ." And it is poor taste, wasteful, and grudging to write "Thanks are due to . . ." instead of "I thank . . .".

One should eschew words that may be understood in two contradictory senses. Such a word is *presently*. Before the 17th century it meant *now* or at present. Then it came to mean at once or immediately. By the end of the 17th century it had acquired its present meaning of soon, shortly, or before long. But lately a number of persons who evidently prefer long words to short ones have begun to use presently in its archaic sense of now.

In consequence the word has been spoilt, and probably it should no longer be used.

Some may try to defend it on the ground that the meaning is clear from the context. But they are right only in cases where the present and future tenses of the verb have different forms, as in the sentence "I shall sit down presently; you are sitting presently." But in the sentence "He is going down town presently" it is impossible to know which is meant, and it may be important, if I want to see him before he goes.

Therefore let us say now and soon or shortly instead of presently and we shall gain precision as well as conciseness

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Retirementitis

Elinor Langer did a commendable service by directing attention to the victimization of America's older citizens by medical quacks, land swindlers, and "quick sell" operators [Science 140, 470 (3 May 1963)]. Her concern for the future of the senate committee on aging under the leadership of a chairman who is "less of a crusader and more adverse to federal participation in remedial efforts" is a fitting alert to those of us who would keep corrective agencies in action.

However, in this pleading for those of the 17½ million who are "living wretched lives" there is carried the impression that none of that segment of our population are: not ill, not poorly housed, and not the victims of the charlatans. Her perfectly laudable account of incidents that would call for public concern, unintentionally, shares with many other activities and proposals in generating a growing unsavory characterization of all postretirement citizens as chronically ill, becoming increasingly senile, and highly probable candidates for mental therapy.

Do "statistics corroborated by daily impressions [dependably] suggest that in America the 'last of life' is not the best of times but the worst"? Not the least objection to such an unsupported caricature is its contribution- to an affliction (unmentioned) "retirementitis" which is brought about by the aged's loss of social privilege and responsi-

bility. When the senior members of the community accept such an estimate of their personality even these, otherwise fit, become candidates for the compassion of their juniors.

It may not be amiss to call attention to the findings of a group of specialists working with the Age Center of New England. After a 5-year assessment of 1000 healthy volunteers aged 65 or over, they say "not so" to most derogatory labels that are too often the unthinking daily impressions of their contemporaries. Their considered estimate is that "healthy aged folks are not very different from [their juniors] except for the stress of being denied the privilege of social usefulness." It is, of course, recognized that 1000 out of 171/2 million is not a convincing sampling and that New England oldsters are not typical of the entire country. However, it does call attention to the fact that there are those who are not "miserable, unpredictable byproducts of our age."

Is it then, perhaps, fitting to propose conscious care in the oversell of the plight of such victims in the interest of a curb to the faulty (almost fearsome) folklore that is becoming evident in the current emphasis on aging? May we conserve the able as well as salvage the less privileged?

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Statistics Section of AAAS

In the 7 December issue [Science 138, 1801 (1962)] Jerzy Neyman expressed his opinions concerning activities of the new AAAS Section U (Statistics). What follows is not intended to be a criticism of Neyman, whose contributions to science and statistics speak for themselves, or a criticism of any organization. But if trends in other statistical organizations are reflected in the growth of the new Section U, it will become only another outlet for papers on mathematical statistics. Is there any justification for this rather strong statement?

Neyman points out that the Institute of Mathematical Statistics now takes care of the communication problem in statistical theory and that this activity overlaps, a little, the activities of the giant American Statistical Association. How I wish this were true! Statistical theory dominates all statistical

publications with which I am familiar, especially the Journal of the American Statistical Association.

The American Statistical Association may be a giant among other statistical organizations, but it is pgymy sized when compared with organizations such as the AAAS. It employs not a single professional statistician. Neyman points to the diversity of subjects presented at a recent ASA meeting. It is true that if one reads programs and other written material, such as the constitution of the ASA, he obtains an impression of diversity of interests. If one attends the sessions and reads the journal, however, he will hear and see little but theory.

Several years ago, I was privileged to organize a session at an ASA annual meeting on "Problems in medical statistics." I violated precedent and asked a congressman, who was also a physician, to tell us about national medical problems to which statisticians could contribute. The congressman's paper was rejected by the two ASA publications. A past president of the ASA who chaired the session was so impressed by the need for recognition of medical statistical problems on the part of the ASA that he wrote a letter urging that a section on medical statistics be established. However, the only new section seriously under consideration at present is one on mathematical statistics.

This is only one of many experiences I have had that support my claim that the ASA is not the diverse organization Neyman would have us believe it is.

The Eastern North American Region of the Biometric Society is much the same as the American Statistical Association. Five years ago [see Biometrics 13, 555 (1957)] this region voted to establish a committee that would improve communication with the medical organizations. No functioning committee has ever been appointed. Yet 3 months ago I sat in the office of the associate editor of one of the largest medical journals extant and listened to his pleas for a series of articles on basic statistics. So if I am skeptical of Neyman's claims concerning activities of statistical organizations, it is because my feelings are based on years of experiences that do not support his statements.

Those who control the activities of the statistical organizations are just as sincere in their views as I am in mine. My point here, however, is that the AAAS may base its own program on mistaken beliefs if Neyman's statements about statistical organizations are taken at face value.

He says that Section U should be "largely limited to the popularization and decompartmentalization of research." This sounds to me more like the job of a science writer than the function of a section. He also states that Section U might bring statisticians and scientists together for exchange of information. I have already mentioned what the Eastern North American Region of the Biometric Society accomplished in this regard! The American Statistical Association has a similar record.

Is there anything positive which might be said about the functions of Section U? By all means, yes! It should perform a statistical-service function for the AAAS. I do not know enough about the statistical problems faced by the AAAS and its members to describe these services in detail. If someone were to appoint me "chief of Section U," however, I would first go around asking AAAS officials what they thought their statistical problems were. Then I would attend many AAAS sessions, listening to the programs through "statistical ears." From the resulting information, a program for Section U would be designed. I have practiced this statistical-service philosophy in my own field, medical statistics, for years. I would not want to do otherwise.

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Science Fairs

Perhaps some comments by a former entrant may be relevant to your editorial on science fairs [Science 140, 1055 (7 June 1963)]. Although the science fair movement in Canada and particularly in Alberta is quite new, it has all the faults you mention.

A distinction may be made between a creative science project and a display. The latter is often a collection or illustration of some process or law that is made solely for a fair and is all too often abandoned afterwards. The creative project—very rare in a city-wide fair—is well described in the editorial: ". . . to formulate a problem, design his approach, make the necessary observations, and then attempt